ABSTRACT

The present invention provides isogenic cell lines and uses said isogenic cell lines in a method for determining a sequence to administer multiple types of chemotherapeutic drugs for killing cancerous cells to reduce the induction of drug cross-resistance in a patent. The methods also involves screening drug candidates to select a lead anticancer drug from amongst a plurality of candidate drugs, the lead having a reduced capacity to induce cross resistance in a patient against one or more known anticancer drugs, and all of the drugs having the ability to kill cancerous cells of the same selected tumour type. Moreover, the methods involve determining a sequence to administer multiple types of cytotoxic drugs for killing undesired cells to reduce the indication of drug cross-resistance in the cells.